

ABSTRACT

An echo canceler includes an adaptive filter that adapts to changes in an echo path, a double-talk detector, and an echo path change detector. The echo path change detector estimates the loss on the echo path, thereby distinguishing true double-talk from apparent double-talk detected by mistake because of a change in the echo path. The adaptive filter continues normal adaptation during the apparent double-talk state when echo path change is also detected. The necessary conditions for detection of echo path change preferably include a small separation between the estimated loss on the echo path and a long-term smoothed value of the estimated loss. The echo path change detector is useful in, for example, the cancellation of line echo in telephone switching systems.